

the BOC has deployed the necessary systems and personnel to provide sufficient access to each of the necessary OSS functions and whether the BOC is adequately assisting competing carriers to understand how to implement and use all of the OSS functions available to them.”” The Commission next assesses “whether the OSS functions that the BOC has deployed are operationally ready, **as a practical matter.**”⁸²

30. Under the first inquiry, a BOC must demonstrate that it has developed sufficient electronic (for functions that the BOC accesses electronically) and manual interfaces to allow competing carriers equivalent access to all of the necessary OSS functions.⁸³ For example, a BOC must provide competing carriers with the specifications necessary for carriers to design or modify their systems in a manner that will enable them to communicate with the BOC’s systems and any relevant interfaces.” In addition, a BOC must disclose to competing carriers any internal business rules⁸⁵ and other formatting information necessary to ensure that a carrier’s requests and orders are processed **efficiently.**⁸⁶ Finally, a BOC must demonstrate that its OSS is designed to

⁸¹ *Id.* at 3992, para. 87; *Ameritech Michigan Order*, 12 FCC Rcd at 20616; *see also Second BellSouth Louisiana Order*, 13 FCC Rcd at 20654; *BellSouth South Carolina Order*, 13 FCC Rcd at 592-93. In making this determination, the Commission “consider[s] all of the automated and manual processes a BOC has undertaken to provide access to OSS functions,” including the interface (or gateway) that connects the competing carrier’s own operations support systems to the BOC; any electronic or manual processing link between that interface and the BOC’s OSS (including all necessary back office systems and personnel); and all of the OSS that a BOC uses in providing network elements and resale services to a competing carrier. *Ameritech Michigan Order*, 12 FCC Rcd at 20615; *see also Second BellSouth Louisiana Order*, 13 FCC Rcd at 20654 n.241.

⁸² *See Bell Atlantic New York Order*, 15 FCC Rcd at 3992, para. 88.

⁸³ *Id.* at 3992, para. 87; *see also Ameritech Michigan Order*. 12 FCC Rcd at 20616, para. 136 (The Commission determines “whether the BOC has deployed the necessary systems and personnel to provide sufficient access to each of the necessary OSS functions and whether the BOC is adequately assisting competing carriers to understand how to implement and use all of the OSS functions available to them.”). For example, a BOC must provide competing carriers the specifications necessary to design their systems interfaces and business rules necessary to format orders, and demonstrate that systems **are** scalable to handle current and projected demand. *Id.*

⁸⁴ *Id.*

⁸⁵ Business rules refer to the protocols that a BOC uses to ensure uniformity in the format of orders and include information concerning ordering codes such **as** universal service ordering codes (USOCs) and field identifiers (**FIDs**). *Id.*; *see also Ameritech Michigan Order*, 12 FCC Rcd at 20617 n.335.

⁸⁶ *Bell Atlantic New York Order*, 15 FCC Rcd at 3992, para. 88.

accommodate both current demand and projected demand for competing carriers' access to OSS functions.⁸⁷ Although not a prerequisite, the Commission continues to encourage the use of industry standards as an appropriate means of meeting the needs of a competitive local exchange market.⁸⁸

31. Under the second inquiry, the Commission examines performance measurements and other evidence of commercial readiness to ascertain whether the BOC's OSS is handling current demand and will be able to handle reasonably foreseeable future volumes.⁸⁹ The most probative evidence that OSS functions are operationally ready is actual commercial usage.⁹⁰ Absent sufficient and reliable data on commercial usage, the Commission will consider the results of carrier-to-carrier testing, independent third-party testing, and internal testing in assessing the commercial readiness of a BOC's OSS.⁹¹ Although the Commission does not require OSS testing, a persuasive test will provide us with an objective means by which to evaluate a BOC's OSS readiness where there is little to no evidence of commercial usage, or may otherwise strengthen an application where the BOC's evidence of actual commercial usage is weak or is otherwise challenged by competitors. The persuasiveness of a third-party review, however, is dependent upon the qualifications, experience and independence of the third party and the conditions and scope of the review itself.⁹² If the review is limited in scope or depth or is not independent and blind, the Commission will give it minimal weight. As noted above, to the extent the Commission reviews performance data, it looks at the totality of the circumstances and generally does not view individual performance disparities, particularly if they are isolated and slight, as dispositive of whether a BOC has satisfied its checklist obligations.⁹³ Individual performance disparities may, nevertheless, result in a finding of checklist noncompliance, particularly if the disparity is substantial or has endured for a long time, or if it is accompanied by other evidence of discriminatory conduct or evidence that competing carriers have been denied a meaningful opportunity to compete.

⁸⁷ *Id.*

⁸⁸ *See id.*

⁸⁹ *Id.* at 3993, para. 89.

⁹⁰ *Id.*

⁹¹ *Id.*

⁹² *See id.*; *Ameritech Michigan Order*, 12 FCC Rcd at 20659 (emphasizing that a third-party review should encompass the entire obligation of the incumbent LEC to provide nondiscriminatory access, and, where applicable, should consider the ability of actual competing carriers in the market to operate using the incumbent's OSS access).

⁹³ *See SWBT Kansas/Oklahoma Order*, 16 FCC Rcd at 6301-02, para. 138.

a. Relevance of a BOC's Prior Section 271 Orders

32. The *SWBT Kansas/Oklahoma Order* specifically outlined a non-exhaustive evidentiary showing that must be made in the initial application when a BOC seeks to rely on evidence presented in another application." First, a BOC's application must explain the extent to which the OSS are "the same" – that is, whether it employs the shared use of a single OSS, or the use of systems that are identical, but separate?" To satisfy this inquiry, the Commission looks to whether the relevant states utilize a common set of processes, business rules, interfaces, systems and, in many instances, even personnel." The Commission will also carefully examine third party reports that demonstrate that the BOC's OSS are the same in each of the relevant states?" Finally, where a BOC has discernibly separate OSS, it must demonstrate that its OSS reasonably can be expected to behave in the same manner?" Second, unless an applicant seeks to establish only that certain discrete components of its OSS are the same, an applicant must submit evidence relating to all aspects of its OSS, including those OSS functions performed by BOC personnel.

b. Pre-Ordering

33. A BOC must demonstrate that: (i) it offers nondiscriminatory access to OSS pre-ordering functions associated with determining whether a loop is capable of supporting xDSL advanced technologies; (ii) competing carriers successfully have built and are using application-to-application interfaces to perform pre-ordering functions and are able to integrate pre-ordering and ordering interfaces;⁹⁹ and (iii) its pre-ordering systems provide reasonably prompt response times and are consistently available in a manner that affords competitors a meaningful opportunity to *compete*.¹⁰⁰

⁹⁴ See *id.* at 6286-91, paras. 107-18

⁹⁵ See *id.* at 6288, para. 111.

⁹⁶ The Commission has consistently held that a BOC's OSS includes both mechanized systems and manual processes, and thus the OSS functions performed by BOC personnel have been part of the FCC's OSS functionality and commercial readiness reviews.

⁹⁷ See *SWBT Kansas/Oklahoma Order, id.* at 6287, para. 108.

⁹⁸ See *id.* at 6288, para. 111

⁹⁹ In prior orders, the Commission has emphasized that providing pre-ordering functionality through an application-to-application interface is essential in enabling carriers to conduct real-time processing and to integrate pre-ordering and ordering functions in the same manner as the BOC. *SWBT Texas Order, 15 FCC Rcd* at 18426, para. 148.

¹⁰⁰ The Commission has held previously that an interface that provides responses in a prompt timeframe and is stable and reliable, is necessary for competing carriers to market their services and serve their customers as efficiently and at the same level of quality as a BOC serves its own (continued...)

34. The pre-ordering phase of OSS generally includes those activities that a carrier undertakes to gather and verify the information necessary to place an order.'" Given that pre-ordering represents the first exposure that a prospective customer has to a competing carrier, it is critical that a competing carrier is able to accomplish pre-ordering activities in a manner no less efficient and responsive than the incumbent.'" Most of the pre-ordering activities that must be undertaken by a competing carrier to order resale services and UNEs from the incumbent are analogous to the activities a **BOC** must accomplish to furnish service to its own customers. For these pre-ordering functions, a **BOC** must demonstrate that it provides requesting carriers access that enables them to perform pre-ordering functions in substantially the same time and manner as its retail operations.'" For those pre-ordering functions that lack a retail analogue, a **BOC** must provide access that affords an efficient competitor a meaningful opportunity to compete.'" In prior orders, the Commission has emphasized that providing pre-ordering functionality through an application-to-application interface is essential in enabling carriers to conduct real-time processing and to integrate pre-ordering and ordering functions in the same manner as the **BOC**.¹⁰⁵

(Continued from previous page)

customers. *See Bell Atlantic New York Order*, 15 FCC Rcd at 4025 and 4029, paras. 145 and 154.

¹⁰¹ *See Bell Atlantic New York Order*, 15 FCC Rcd at 4014, para. 129; *see also Second BellSouth Louisiana Order*, 13 FCC Rcd at 20660, para. 94 (referring to "pre-ordering and ordering" collectively as "the exchange of information between telecommunications carriers about current or proposed customer products and services or unbundled network elements or some combination thereof"). In prior orders, the Commission has identified the following five pre-order functions: (1) customer service record (CSR) information; (2) address validation; (3) telephone number information; (4) due date information; (5) services and feature information. *See Bell Atlantic New York Order*, 15 FCC Rcd at 4015, para. 132; *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20660, para. 94; *BellSouth South Carolina Order*, 13 FCC Rcd at 619, para. 147.

¹⁰² *Bell Atlantic New York Order*, 15 FCC Rcd at 4014, para. 129.

¹⁰³ *Id.*; *see also BellSouth South Carolina Order*, 13 FCC Rcd at 623-29 (concluding that failure to deploy an application-to-application interface denies competing carriers equivalent access to pre-ordering OSS functions).

¹⁰⁴ *Bell Atlantic New York Order*, 15 FCC Rcd at 4014, para. 129.

¹⁰⁵ *See id.* at 4014, para. 130; *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20661-67, para. 105.

(i) Access to Loop Qualification Information

35. In accordance with the *UNE Remand Order*,¹⁰⁶ the Commission requires incumbent carriers to provide competitors with access to all of the same detailed information about the loop that is available to the incumbents,¹⁰⁷ and in the same time frame, so that a competing carrier can make an independent judgment at the pre-ordering stage about whether an end user loop is capable of supporting the advanced services equipment the competing carrier intends to install.” Under the *UNE Remand Order*, the relevant inquiry is not whether a BOC’s retail ~~arm~~ accesses such underlying information but whether such information exists anywhere in a BOC’s back office and can be accessed by any of a BOC’s personnel.¹⁰⁹ Moreover, a BOC may not “filter or digest” the underlying information and may not provide only information that is useful in provisioning of a particular type of xDSL that a BOC offers.” A BOC must also provide loop qualification information based, for example, on an individual address or zip code of the end users in a particular wire center, NXX code or on any other basis that the BOC provides such information to itself. Moreover, a BOC must also provide access for competing carriers to the loop qualifying information that the BOC can itself access manually or electronically. Finally, a BOC must provide access to loop qualification information to competitors within the same time intervals it is provided to the BOC’s retail operations or its

¹⁰⁶ *UNE Remand Order*, 15 FCC Rcd at 3885, para. 426 (determining “that the pre-ordering function includes access to loop qualification information”).

¹⁰⁷ *See id.* At a minimum, a BOC must provide (1) the composition of the loop material, including both fiber and copper; (2) the existence, location and **type** of any electronic or other equipment on the loop, including but not limited to, digital loop carrier or other remote concentration devices, feeder/distribution interfaces, bridge taps, load coils, pair-gain devices, disturbers in the same or adjacent binder groups; (3) the loop length, including the length and location of each type of transmission media; (4) the wire **gauge(s)** of the loop; and (5) the electrical parameters of the loop, which may determine the suitability of the loop for various technologies. *Id.*

¹⁰⁸ As the Commission has explained in prior proceedings, because characteristics of a loop, such as its length and the presence of various impediments to digital transmission, can hinder certain advanced services technologies, carriers often seek to “pre-qualify” a loop by accessing basic loop makeup information that will assist carriers in ascertaining whether the loop, either with or without the removal of the impediments, can support a particular advanced service. *See id.*, 15 FCC Rcd at 4021, para. 140.

¹⁰⁹ *UNE Remand Order*, 15 FCC Rcd at 3885-3887, paras. 427-431 (noting that “to the extent such information is not normally provided to the incumbent’s retail personnel, but can be obtained by contacting back office personnel, it must be provided to requesting carriers within the same time frame that any incumbent personnel are able to obtain such information.”).

¹¹⁰ *See SWBT Kansas Oklahoma Order*, 16 FCC Rcd at 6292-93, para. 121.

advanced services affiliate.” As the Commission determined in the *UNE Remand Order*, however, “to the extent such information is not normally provided to the incumbent’s retail personnel, but can be obtained by contacting back office personnel, it must be provided to requesting carriers within the same time frame that any incumbent personnel **are** able to obtain such information.””

c. **Ordering**

36. Consistent with section 271(c)(2)(B)(ii), a BOC must demonstrate its ability to provide competing carriers with access to the OSS functions necessary for placing wholesale orders. For those functions of the ordering systems for which there is a retail analogue, a BOC must demonstrate, with performance data and other evidence, that it provides competing carriers with access to its OSS in substantially the same time and manner **as** it provides to its retail operations. For those ordering functions that lack a direct retail analogue, a BOC must demonstrate that its systems and performance allow an efficient carrier a meaningful opportunity to compete. As in prior section 271 orders, the Commission looks primarily at the applicant’s ability to return order confirmation notices, order reject notices, order completion notices and jeopardies, and at its order flow-through rate.”

d. **Provisioning**

37. A BOC must provision competing carriers’ orders for resale and UNE-P services in substantially the **same** time and manner **as** it provisions orders for its own retail customers.¹¹⁴ Consistent with the approach in prior section 271 orders, the Commission examines a BOC’s provisioning processes, **as well as** its performance with respect to provisioning timeliness (i.e., missed due dates and average installation intervals) and provisioning quality (i.e., service problems experienced at the provisioning **stage**).¹¹⁵

¹¹¹ *Id.*

¹¹² *UNE Remand Order*, 15 FCC Rcd at 3885-3887, paras. 427-31.

¹¹³ See *SWBT Texas Order*, 15 FCC Rcd at 18438, para. 170; *Bell Atlantic New York Order*, 15 FCC Rcd at 4035-39, paras. 163-66. The Commission examines (i) order flow-through rates, (ii) jeopardy notices and (iii) order completion notices using the “same time and manner” standard. The Commission examines order confirmation notices and order rejection notices using the “meaningful opportunity to compete” standard.

¹¹⁴ See *Bell Atlantic New York*, 15 FCC Rcd at 4058, para. 196. For provisioning timeliness, the Commission looks to missed due dates and average installation intervals; for provisioning quality, the Commission looks to service problems experienced at the provisioning stage.

¹¹⁵ *Id.*

e. Maintenance and Repair

38. A competing carrier that provides service through resale or UNEs remains dependent upon the incumbent LEC for maintenance and repair. Thus, **as** part of its obligation to provide nondiscriminatory access to OSS functions, a BOC must provide requesting carriers with nondiscriminatory access to its maintenance and repair **systems**.¹¹⁶ To the extent a BOC performs analogous maintenance and repair functions for its retail operations, it must provide competing carriers access that enables them to perform maintenance and repair functions “in substantially the same time and manner” as a BOC provides its retail **customers**.¹¹⁷ Equivalent access ensures that competing carriers can assist customers experiencing service disruptions using the same network information and diagnostic tools that are available to BOC **personnel**.¹¹⁸ Without equivalent access, a competing carrier would be placed at a significant competitive disadvantage, as its customer would perceive a problem with a BOC’s network **as** a problem with the competing carrier’s own network.”

f. Billing

39. A BOC must provide nondiscriminatory access to its billing functions, which is necessary to enable competing carriers to provide accurate and timely bills to their **customers**.¹²⁰ In making this determination, the Commission assesses a BOC’s billing processes and systems, and its performance data. Consistent with prior section 271 orders, a BOC must demonstrate that it provides competing carriers with complete and accurate reports on the service usage of competing carriers’ customers in substantially the same time and manner that a BOC provides such information to itself, and with wholesale bills in a manner that gives competing carriers a meaningful opportunity to compete.”

g. Change Management Process

40. Competing carriers need information about, and specifications for, an incumbent’s systems and interfaces to develop and modify their systems and procedures to access the

¹¹⁶ *Id.* at 4067, para. 212; *Second BellSouth Louisiana Order*, 13FCC Rcd at 20692; *Ameritech Michigan Order*, 12FCC Rcd at 20613, 20660-61.

¹¹⁷ *Bell Atlantic New York Order*, 15FCC Rcd at 4058, para. 196; *see also Second BellSouth Louisiana Order*, 13FCC Rcd at 20692-93.

¹¹⁸ *Bell Atlantic New York Order*, 15FCC Rcd at 4058, para. 196.

¹¹⁹ *Id.*

¹²⁰ *See SWBT Texas Order*, 15FCC Rcd at 18461, para. 210.

¹²¹ *See id.*; *SWBT Kansas/Oklahoma Order*, 16FCC Rcd at 6316-17, at para. 163

incumbent's OSS functions.'" Thus, in order to demonstrate that it is providing nondiscriminatory access to its OSS, a BOC must first demonstrate that it "has deployed the necessary systems and personnel to provide sufficient access to each of the necessary OSS functions and . . . is adequately assisting competing carriers to understand how to implement and use all of the OSS functions available to **them**."¹²³ By showing that it adequately assists competing carriers to use available OSS functions, a BOC provides evidence that it offers an efficient competitor a meaningful opportunity to compete.'" **As** part of this demonstration, the Commission will give substantial consideration to the existence of an adequate change management process and evidence that the BOC has adhered **to** this process over **time**.¹²⁵

41. The change management process refers to the methods and procedures that the BOC employs to communicate with competing carriers regarding the performance of, and changes in, the BOC's OSS.¹²⁶ Such changes may include updates to existing functions that impact competing carrier interface(s) upon a BOC's release of new interface software; technology changes that require competing carriers to meet new technical requirements upon a BOC's software release date; additional functionality changes that may be used at the competing carrier's option, on or after a BOC's release date for new interface software; and changes that may be mandated by regulatory authorities.'" Without a change management process in place, a BOC can impose substantial costs on competing carriers simply by making changes to its system and interfaces without providing adequate testing opportunities and accurate and timely notice and documentation of the **changes**.¹²⁸ Change management problems can impair a competing carrier's ability to obtain nondiscriminatory access to UNEs, and hence a BOC's compliance with section 271(2)(B)(ii).¹²⁹

42. In evaluating whether a BOC's change management plan affords an efficient competitor a meaningful opportunity to compete, the Commission first assesses whether the plan

¹²² *Bell Atlantic New York Order*, 15 FCC Rcd at 3999-4000, para. 102; *First BellSouth Louisiana Order*, 13 FCC Rcd at 6279 n.197; *BellSouth South Carolina Order*, 13 FCC Rcd at 625 n.467; *Ameritech Michigan Order*, 12 FCC Rcd at 20617 n.334; *Local Competition Second Report and Order*, 11 FCC Rcd at 19742.

¹²³ *Bell Atlantic New York Order*, 15 FCC Rcd at 3999, para. 102.

¹²⁴ *Id.* at 3999-4000, para. 102.

¹²⁵ *Id.* at 4000, para. 102.

¹²⁶ *Id.* at 4000, para. 103.

¹²⁷ *Id.*

¹²⁸ *Id.* at 4000, para. 103.

¹²⁹ *Id.*

is adequate. In making this determination, it assesses whether the evidence demonstrates: (1) that information relating to the change management process is clearly organized and readily accessible to competing carriers;¹³⁰ (2) that competing carriers had substantial input in the design and continued operation of the change management process;” (3) that the change management plan defines a procedure for the timely resolution of change management disputes;¹³² (4) the availability of a stable testing environment that mirrors production;” and (5) the efficacy of the documentation the BOC makes available for the purpose of building an electronic gateway.” After determining whether the BOC’s change management plan is adequate, the Commission evaluates whether the BOC has demonstrated a pattern of compliance with this plan.¹³⁵

2. UNE Combinations

43. In order to comply with the requirements of checklist item 2, a BOC must show that it is offering “[n]ondiscriminatory access to network elements in accordance with the requirements of section 251(c)(3).”¹³⁶ Section 251(c)(3) requires an incumbent LEC to “provide, to any requesting telecommunications carrier . . . nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms and conditions that are just, reasonable, and nondiscriminatory.”” Section 251(c)(3) of the Act also requires incumbent LECs to provide UNEs in a manner that allows requesting carriers to combine such elements in order to provide a telecommunications service.¹³⁸

44. In the *Ameritech Michigan Order*, the Commission emphasized that the ability of requesting carriers to use UNEs, as well as combinations of UNEs, is integral to achieving

¹³⁰ *Id.* at 4002, para. 107.

¹³¹ *Id.* at 4000, para. 104.

¹³² *Id.* at 4002, para. 108.

¹³³ *Id.* at 4002-03, paras. 109-10.

¹³⁴ *Id.* at 4003-04, para. 110. In the *Bell Atlantic New York Order*, the Commission used these factors in determining whether Bell Atlantic had an adequate change management process in place. *See id.* at 4004, para. 111. The Commission left open the possibility, however, that a change management plan different from the one implemented by Bell Atlantic may be sufficient to demonstrate compliance with the requirements of section 271. *Id.*

¹³⁵ *Id.* at 3999, para. 101, 4004-05, para. 112.

¹³⁶ 47 U.S.C. § 271(c)(2)(B)(ii).

¹³⁷ *Id.* § 251(c)(3).

¹³⁸ *Id.*

Congress' objective of promoting competition in local telecommunications markets.” Using combinations of UNEs provides a competitor with the incentive and ability to package and market services in ways that differ from the BOCs' existing service offerings in order to compete in the local telecommunications market.¹⁴⁰ Moreover, combining the incumbent's UNEs with their own facilities encourages facilities-based competition and allows competing providers to provide a wide array of competitive choices.¹⁴¹ Because the use of combinations of UNEs is an important strategy for entry into the local telecommunications market, as well as an obligation under the requirements of section 271, the Commission examines section 271 applications to determine whether competitive carriers are able to combine network elements as required by the Act and the Commission's regulations.¹⁴²

3. Pricing of Network Elements

45. Checklist item 2 of section 271 states that a BOC must provide “nondiscriminatory access to network elements in accordance with sections 251(c)(3) and 252(d)(1)” of the Act.” Section 251(c)(3) requires incumbent LECs to provide “nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms, and conditions that are just, reasonable, and nondiscriminatory.”¹⁴⁴ Section 252(d)(1) requires that a state commission's determination of the just and reasonable rates for network elements shall be based on the cost of providing the network elements, shall be

¹³⁹ *Ameritech Michigan Order*, 12 FCC Rcd at 20718-19; *BellSouth South Carolina Order*, 13 FCC Rcd at 646.

¹⁴⁰ *BellSouth South Carolina Order*, 13 FCC Rcd at 646; *see also Local Competition First Report and Order*, 11 FCC Rcd at 15666-68.

¹⁴¹ *Bell Atlantic New York Order*, 15 FCC Rcd at 4077-78, para. 230.

¹⁴² *Id. In Iowa Utilities Board v. FCC*, 219 F.3d 744 (8th Cir. 2000), the Eighth Circuit had vacated the Commission's “additional combinations” rules (47 C.F.R. Sections 51-315(c)-(f)). However, on May 13, 2002, the Supreme Court reversed the Eighth Circuit with respect to those rules and remanded the case to the court of appeals “for further proceedings consistent with this opinion.” *Verizon Communications Inc. v. FCC*, 122 S.Ct. 1646, 1687. *See also id.* at 1683-87. In response, the Eighth Circuit, on August 21, 2002, vacated its prior opinion insofar as it had vacated the pertinent combinations rules and denied the petitions for review with respect to those rules. *Zowa Utilities Board v. FCC*, 8th Circuit Nos. 96-3321, *et al.*, Judgment, filed August 21, 2002.). *See also Competitive Telecommunications Association v. FCC*, 309 F.3d 8 (2002) (affirming the Commission's interim decision to limit the ability of competitive local exchange carriers to gain access to a network element combination known as the enhanced extended link).

¹⁴³ 47 U.S.C. § 271(c)(2)(B)(ii).

¹⁴⁴ *Id.* § 251(c)(3).

nondiscriminatory, and may include a reasonable **profit**.¹⁴⁵ Pursuant to this statutory mandate, the Commission has determined that prices for UNEs must be based on the total element long run incremental cost (TELRIC) of providing those **elements**.¹⁴⁶ The Commission also promulgated rule 51.315(b), which prohibits incumbent LECs from separating already combined elements before providing them to competing carriers, except on **request**.¹⁴⁷ The Commission has previously held that it will not conduct a *de novo* review of a state's pricing determinations and will reject an application **only** if "basic TELRIC principles are violated or the state commission makes clear errors in factual findings on matters so substantial that the end result falls outside the range that the reasonable application of TELRIC principles would **produce**."¹⁴⁸

46. Although the U.S. Court of Appeals for the Eighth Circuit stayed the Commission's pricing rules in 1996,¹⁴⁹ the Supreme Court restored the Commission's pricing authority on January 25, 1999, and remanded to the Eighth Circuit for consideration of the merits of the challenged **rules**.¹⁵⁰ **On** remand from the Supreme Court, the Eighth Circuit concluded that while TELRIC is an acceptable method for determining costs, certain specific requirements

¹⁴⁵ 47 U.S.C. § 252(d)(1).

¹⁴⁶ *Local Competition First Report and Order*, 11 FCC Rcd at 15844-46, paras. 674-79; 47 C.F.R. §§ 51.501 *et seq.*; *see also Deployment of Wireline Services Offering Advanced Telecommunications Capabilities*, CC Docket No. 98-147, and *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, Third Report and Order and Fourth Report and Order, 14 FCC Rcd 20912, 20974, para. 135 (*Line Sharing Order*) (concluding that states should set the prices for line sharing **as** a new network element in the same manner **as** the state sets prices for other UNEs).

¹⁴⁷ *See* 47 C.F.R. § 51.315(b).

¹⁴⁸ *Bell Atlantic New York Order*, 15 FCC Rcd at 4084, para. 244; *SWBT Kansas/Oklahoma Order*, 16 FCC Rcd at 6266, para. 59.

¹⁴⁹ *Iowa Utils. Bd. v. FCC*, 120 F.3d 753, 800, 804, 805-06 (8th Cir. 1997).

¹⁵⁰ *AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366 (1999). In reaching its decision, the Court acknowledged that section 201(b) "explicitly grants the FCC jurisdiction to make rules governing matters to which the 1996 Act applies." *Id.* at 380. Furthermore, the Court determined that section 251(d) also provides evidence of an express jurisdictional grant by requiring that "the Commission [shall] complete all actions necessary to establish regulations to implement the requirements of this section." *Id.* at 382. The Court also held that the pricing provisions implemented under the Commission's rulemaking authority do not inhibit the establishment of rates by the states. The Court concluded that the Commission has jurisdiction to design a pricing methodology to facilitate local competition under the 1996 Act, including pricing for interconnection and unbundled access, **as** "it is the States that will apply those standards and implement that methodology, determining the concrete result." *Id.*

contained within the Commission's pricing rules were contrary to Congressional intent.'" The Eighth Circuit stayed the issuance of its mandate pending review by the Supreme Court.¹⁵² The Supreme Court, on May 13, 2002, upheld the Commission's forward-looking pricing methodology in determining costs of UNEs and "reverse[d] the Eighth Circuit's judgment insofar as it invalidated TELRIC as a method for setting rates under the Act."¹⁵³ Accordingly, the Commission's pricing rules remain in effect.

C. Checklist Item 3 – Poles, Ducts, Conduits and Rights of Way

47. Section 271(c)(2)(B)(iii) requires BOCs to provide "[n]ondiscriminatory access to the poles, ducts, conduits, and rights-of-way owned or controlled by the [BOC] at just and reasonable rates in accordance with the requirements of section 224."¹⁵⁴ Section 224(f)(1) states that "[a] utility shall provide a cable television system or any telecommunications carrier with nondiscriminatory access to any pole, duct, conduit, or right-of-way owned or controlled by it."¹⁵⁵ Notwithstanding this requirement, section 224(f)(2) permits a utility providing electric service to deny access to its poles, ducts, conduits, and rights-of-way, on a nondiscriminatory basis, "where there is insufficient capacity and for reasons of safety, reliability and generally applicable engineering purposes."¹⁵⁶ Section 224 also contains two separate provisions governing the

¹⁵¹ *Iowa Utils. Bd. v. FCC*, 219 F.3d 744 (8th Cir. 2000), *petition for cert. granted sub nom. Verizon Communications v. FCC*, 121 S. Ct. 877 (2001).

¹⁵² *Iowa Utils. Bd. v. FCC*, No. 96-3321 *et al.* (8th Cir. Sept. 25, 2000).

¹⁵³ *Verizon v. FCC*, 122 S.Ct. at 1679. On August 21, 2002, the Eighth Circuit implemented the Supreme Court's mandate with respect to the Commission's TELRIC pricing rule by vacating its prior opinion insofar as it had invalidated that rule and by denying the petitions for review of that rule. *Iowa Utilities Board v. FCC*, 8th Circuit Nos. 96-3321, *et al.*, Judgment, filed August 21, 2002.

¹⁵⁴ 47 U.S.C. § 271(c)(2)(B)(iii). As originally enacted, section 224 was intended to address obstacles that cable operators encountered in obtaining access to poles, ducts, conduits, or rights-of-way owned or controlled by utilities. The 1996 Act amended section 224 in several important respects to ensure that telecommunications carriers as well as cable operators have access to poles, ducts, conduits, or rights-of-way owned or controlled by utility companies, including LECs. *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20706, n.574.

¹⁵⁵ 47 U.S.C. § 224(f)(1). Section 224(a)(1) defines "utility" to include any entity, including a LEC, that controls "poles, ducts, conduits, or rights-of-way used, in whole or in part, for any wire communications." 47 U.S.C. § 224(a)(1).

¹⁵⁶ 47 U.S.C. § 224(f)(2). In the *Local Competition First Report and Order*, the Commission concluded that, although the statutory exception enunciated in section 224(f)(2) appears to be limited to utilities providing electrical service, LECs should also be permitted to deny access to their poles, ducts, conduits, and rights-of-way because of insufficient capacity and for reasons of safety, reliability and generally applicable engineering purposes, provided the assessment of such (continued...)

maximum rates that a utility may charge for “pole attachments.”¹⁵⁷ Section 224(b)(1) states that the Commission shall regulate the rates, terms, and conditions governing pole attachments to ensure that they are “just and reasonable.”¹⁵⁸ Notwithstanding this general grant of authority, section 224(c)(1) states that “[n]othing in [section 224] shall be construed to apply to, or to give the Commission jurisdiction with respect to the rates, terms, and conditions, or access to poles, ducts, conduits and rights-of-way as provided in [section 224(f)], for pole attachments in any case where such matters are regulated by a State.”¹⁵⁹ As of 1992, nineteen states, including Connecticut, had certified to the Commission that they regulated the rates, terms, and conditions for pole attachments.¹⁶⁰

D. Checklist Item 4 – Unbundled Local Loops

48. Section 271(c)(2)(B)(iv) of the Act, item 4 of the competitive checklist, requires that a BOC provide “[l]ocal loop transmission from the central office to the customer’s premises, unbundled from local switching or other services.”¹⁶¹ The Commission has defined the loop as a transmission facility between a distribution frame, or its equivalent, in an incumbent LEC central office, and the demarcation point at the customer premises. This definition includes different types of loops, including two-wire and four-wire analog voice-grade loops, and two-wire and four-wire loops that are conditioned to transmit the digital signals needed to provide service such as ISDN, ADSL, HDSL, and DS1-level signals.¹⁶²

(Continued from previous page) _____

factors is done in a nondiscriminatory manner. *Local Competition First Report and Order*, 11 FCC Rcd at 16080-81, paras. 1175-77.

¹⁵⁷ Section 224(a)(4) defines “pole attachment” as “any attachment by a cable television system or provider of telecommunications service to a pole, duct, conduit, or right-of-way owned or controlled by a utility.” 47 U.S.C. § 224(a)(4).

¹⁵⁸ 47 U.S.C. § 224(b)(1).

¹⁵⁹ *Id.* § 224(c)(1). The 1996 Act extended the Commission’s authority to include not just rates, terms, and conditions, but also the authority to regulate nondiscriminatory access to poles, ducts, conduits, and rights-of-way. *Local Competition First Report and Order*, 11 FCC Rcd at 16104, para. 1232; 47 U.S.C. § 224(f). Absent state regulation of terms and conditions of nondiscriminatory attachment access, the Commission retains jurisdiction. *Local Competition First Report and Order*, 11 FCC Rcd at 16104, para. 1232; 47 U.S.C. § 224(c)(1); *see also* *Bell Atlantic New York Order*, 15 FCC Rcd at 4093, para. 264.

¹⁶⁰ *See States That Have Certified That They Regulate Pole Attachments*, Public Notice, 7 FCC Rcd 1498 (1992); 47 U.S.C. § 224(f).

¹⁶¹ 47 U.S.C. § 271(c)(2)(B)(iv).

¹⁶² *Local Competition First Report and Order*, 11 FCC Rcd at 15691, para. 380; *UNE Remand Order*, 15 FCC Rcd at 3772-73, paras. 166-67, n.301 (retaining definition of the local loop from (continued...))

49. In order to establish that it is “providing” unbundled local loops in compliance with checklist item 4, a BOC must demonstrate that it has a concrete and specific legal obligation to furnish loops and that it is currently doing so in the quantities that competitors demand and at an acceptable level of quality. A BOC must also demonstrate that it provides nondiscriminatory access to unbundled loops.” Specifically, the BOC must provide access to any functionality of the loop requested by a competing carrier unless it is not technically feasible to condition the loop facility to support the particular functionality requested. In order to provide the requested loop functionality, such as the ability to deliver xDSL services, the BOC may be required to take affirmative steps to condition existing loop facilities to enable competing carriers to provide services not currently provided over the facilities. The BOC must provide competitors with access to unbundled loops regardless of whether the BOC uses digital loop carrier (DLC) technology or similar remote concentration devices for the particular loops sought by the competitor.

50. On December 9, 1999, the Commission released the *Line Sharing Order*, which introduced new rules requiring BOCs to offer requesting carriers unbundled access to the high-frequency portion of local loops (HFPL).¹⁶⁴ HFPL is defined as “the frequency above the voiceband on a copper loop facility that is being used to **carry** traditional POTS analog circuit-switched voiceband transmissions.” This definition applies whether a BOC’s voice customers are served by copper or by digital loop carrier equipment. Competing carriers should have access to the HFPL at either a central office or at a remote terminal. However, the HFPL network element is **only** available on a copper loop facility.¹⁶⁵

51. To determine whether a BOC makes line sharing available consistent with Commission rules set out in the *Line Sharing Order*, the Commission examines categories of performance measurements identified in the *Bell Atlantic New York* and *SWBT Texas Orders*. Specifically, a successful BOC applicant could provide evidence of BOC-caused missed installation due dates, average installation intervals, trouble reports within 30 days of installation, mean time to repair, trouble report rates, and repeat trouble report rates. In addition, a successful

(Continued from previous page)

the *Local Competition First Report and Order*, but replacing the phrase “network interconnection device” with “demarcation point,” and making explicit that dark fiber and loop conditioning are among the features, functions and capabilities of the loop).

¹⁶³ *SWBT Texas Order*, 15 FCC Rcd at 18481-81, para. 248; *Bell Atlantic New York Order*, 15 FCC Rcd at 4095, para. 269; *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20637, para. 185.

¹⁶⁴ See *Line Sharing Order*, 14 FCC Rcd at 20924-27, paras. 20-27; see also n.63 at C-12 *supra*.

¹⁶⁵ See *Deployment of Wireline Services offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Third Report and Order on Reconsideration in CC Docket No. 98-147, Fourth Report and Order on Reconsideration in CC Docket No. 96-98, 16 FCC Rcd 2101, 2106-07, para. 10 (2001).

BOC applicant should provide evidence that its central offices are operationally ready to handle commercial volumes of line sharing and that it provides competing carriers with nondiscriminatory access to the pre-ordering and ordering OSS functions associated with the provision of line shared loops, including access to loop qualification information and databases.

52. Section 271(c)(2)(B)(iv) also requires that a BOC demonstrate that it makes line splitting available to competing carriers so that competing carriers may provide voice and data service over a single loop.¹⁶⁶ In addition, a BOC must demonstrate that a competing carrier, either alone or in conjunction with another carrier, is able to replace an existing UNE-P configuration used to provide voice service with an arrangement that enables it to provide voice and data service to a customer. To make such a showing, a BOC must show that it has a legal obligation to provide line splitting through rates, terms, and conditions in interconnection agreements and that it offers competing carriers the ability to order an unbundled xDSL-capable loop terminated to a collocated splitter and DSLAM equipment, and combine it with unbundled switching and shared transport.¹⁶⁷

E. Checklist Item 5 – Unbundled Local Transport

53. Section 271(c)(2)(B)(v) of the competitive checklist requires a BOC to provide “[l]ocal transport from the trunk side of a wireline local exchange carrier switch unbundled from switching or other services.”¹⁶⁸ The Commission has required that BOCs provide both dedicated and shared transport to requesting carriers.¹⁶⁹ Dedicated transport consists of BOC transmission facilities dedicated to a particular customer or carrier that provide telecommunications between wire centers owned by BOCs or requesting telecommunications carriers, or between switches owned by BOCs or requesting telecommunications carriers.¹⁷⁰ Shared transport consists of

¹⁶⁶ See generally *SWBT Texas Order*, 15 FCC Rcd at 18515-17, paras. 323-329 (describing line splitting); 47 C.F.R. § 51.703(c) (requiring that incumbent LECs provide competing carriers with access to unbundled loops in a manner that allows competing carriers “to provide any telecommunications service that can be offered by means of that network element”).

¹⁶⁷ See *SWBT Kansas/Oklahoma Order*, 16 FCC Rcd at 6348, para. 220.

¹⁶⁸ 47 U.S.C. § 271(c)(2)(B)(v).

¹⁶⁹ *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20719, para. 201.

¹⁷⁰ *Id.* A BOC has the following obligations with respect to dedicated transport: (a) provide unbundled access to dedicated transmission facilities between BOC central offices or between such offices and serving wire centers (SWCs); between SWCs and interexchange carriers points of presence (POPs); between tandem switches and SWCs, end offices or tandems of the BOC, and the wire centers of BOCs and requesting carriers; (b) provide all technically feasible transmission capabilities such as DS1, DS3, and Optical Carrier levels that the competing carrier could use to provide telecommunications; (c) not limit the facilities to which dedicated interoffice transport facilities are connected, provided such interconnections are technically (continued.. ..)

transmission facilities shared by more than one carrier, including the BOC, between end office switches, between end office switches and tandem switches, and between tandem switches, in the BOC's network.¹⁷¹

F. Checklist Item 6 – Unbundled Local Switching

54. Section 271(c)(2)(B)(vi) of the 1996 Act requires a BOC to provide “[l]ocal switching unbundled from transport, local loop transmission, or other services.”¹⁷² In the *Second BellSouth Louisiana Order*, the Commission required BellSouth to provide unbundled local switching that included line-side and trunk-side facilities, plus the features, functions, and capabilities of the switch.¹⁷³ The features, functions, and capabilities of the switch include the basic switching function as well as the same basic capabilities that are available to the incumbent LEC's customers.¹⁷⁴ Additionally, local switching includes all vertical features that the switch is capable of providing, as well as any technically feasible customized routing functions.”

(Continued from previous page)

feasible, or restrict the use of unbundled transport facilities; and (d) to the extent technically feasible, provide requesting carriers with access to digital cross-connect system functionality in the same manner that the BOC offers such capabilities to interexchange carriers that purchase transport services. *Id.* at 20719.

¹⁷¹ *Id.* at 20719, n.650. The Commission also found that a BOC has the following obligations with respect to shared transport: (a) provide shared transport in a way that enables the traffic of requesting carriers to be carried on the same transport facilities that a BOC uses for its own traffic; (b) provide shared transport transmission facilities between end office switches, between its end office and tandem switches, and between tandem switches in its network; (c) permit requesting carriers that purchase unbundled shared transport and unbundled switching to use the same routing table that is resident in the BOC's switch; and (d) permit requesting carriers to use shared (or dedicated) transport as an unbundled element to carry originating access traffic from, and terminating traffic to, customers to whom the requesting carrier is also providing local exchange service. *Id.* at 20720, n.652.

¹⁷² 47 U.S.C. § 271(c)(2)(B)(vi); see also *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20722. A switch connects end user lines to other end user lines, and connects end user lines to trunks used for transporting a call to another central office or to a long-distance carrier. Switches can also provide end users with “vertical features” such as call waiting, call forwarding, and caller ID, and can direct a call to a specific trunk, such as to a competing carrier's operator services.

¹⁷³ *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20722, para. 207.

¹⁷⁴ *Id.*

¹⁷⁵ *Id.* at 20722-23, para. 207.

55. Moreover, in the *Second BellSouth Louisiana Order*, the Commission required BellSouth to permit competing carriers to purchase UNEs, including unbundled switching, in a manner that permits a competing carrier to offer, and bill for, exchange access and the termination of local traffic.¹⁷⁶ The Commission also stated that measuring daily customer usage for billing purposes requires essentially the same OSS functions for both competing carriers and incumbent LECs, and that a BOC must demonstrate that it is providing equivalent access to billing information.¹⁷⁷ Therefore, the ability of a BOC to provide billing information necessary for a competitive LEC to bill for exchange access and termination of local traffic is an aspect of unbundled local switching.¹⁷⁸ Thus, there is an overlap between the provision of unbundled local switching and the provision of the OSS billing function.¹⁷⁹

56. To comply with the requirements of unbundled local switching, a BOC must also make available trunk ports on a shared basis and routing tables resident in the BOC's switch, as necessary to provide access to shared transport functionality.” In addition, a BOC may not limit the ability of competitors to use unbundled local switching to provide exchange access by requiring competing carriers to purchase a dedicated trunk from an interexchange carrier's point of presence to a dedicated trunk port on the local switch.”

G. Checklist Item 7 – 911/E911 Access and Directory Assistance/Operator Services

57. Section 271(c)(2)(B)(vii) of the Act requires a BOC to provide “[n]ondiscriminatory access to – (I) 911 and E911 services.”¹⁸² In the *Ameritech Michigan Order*, the Commission found that “section 271 requires a BOC to provide competitors access to its 911 and E911 services in the same manner that a BOC obtains such access, *i.e.*, at parity.”¹⁸³

¹⁷⁶ *Id.* at 20723, para. 208.

¹⁷⁷ *Id.* at 20723, para. 208 (citing *Ameritech Michigan Order*, 12 FCC Rcd at 20619, para. 140).

¹⁷⁸ *Id.*

¹⁷⁹ *Id.*

¹⁸⁰ *Id.* at 20723, para. 209 (citing the *Ameritech Michigan Order*, 12 FCC Rcd at 20705, para. 306).

¹⁸¹ *Id.* (citing the *Ameritech Michigan Order*, 12 FCC Rcd at 20714-15, paras. 324-25).

¹⁸² 47 U.S.C. § 271(c)(2)(B)(vii). 911 and E911 services transmit calls from end users to emergency personnel. It is critical that a BOC provide competing carriers with accurate and nondiscriminatory access to 911/E911 services so that these carriers' customers are able to reach emergency assistance. Customers use directory assistance and operator services to obtain customer listing information and other call completion services.

¹⁸³ *Ameritech Michigan Order*, 12 FCC Rcd at 20679, para. 256.

Specifically, the Commission found that a BOC “must maintain the 911 database entries for competing LECs with the same accuracy and reliability that it maintains the database entries for its own customers.”¹⁸⁴ For facilities-based carriers, the BOC must provide “unbundled access to [its] 911 database and 911 interconnection, including the provision of dedicated trunks from the requesting carrier’s switching facilities to the 911 control office at parity with what [the BOC] provides to itself.”¹⁸⁵ Section 271(c)(2)(B)(vii)(II) and section 271(c)(2)(B)(vii)(III) require a BOC to provide nondiscriminatory access to “directory assistance services to allow the other carrier’s customers to obtain telephone numbers” and “operator call completion services,” respectively.¹⁸⁶ Section 251(b)(3) of the Act imposes on each LEC “the duty to permit all [competing providers of telephone exchange service and telephone toll service] to have nondiscriminatory access to . . . operator services, directory assistance, and directory listing, with no unreasonable dialing delays.”¹⁸⁷ The Commission concluded in the *Second BellSouth Louisiana Order* that a BOC must be in compliance with the regulations implementing section 251(b)(3) to satisfy the requirements of sections 271(c)(2)(B)(vii)(II) and 271(c)(2)(B)(vii)(III).¹⁸⁸

¹⁸⁴ *Id.*

¹⁸⁵ *Id.*

¹⁸⁶ 47 U.S.C. §§ 271(c)(2)(B)(vii)(II), (III).

¹⁸⁷ *Id.* § 251(b)(3). The Commission implemented section 251(b)(3) in the *Local Competition Second Report and Order*, 47 C.F.R. § 51.217; *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Second Report and Order and Memorandum Opinion and Order, 11 FCC Rcd 19392 (1996) (*Local Competition Second Report and Order*) vacated in part sub nom. *People of the State of California v. FCC*, 124 F.3d 934 (8th Cir. 1997), overruled in part, *AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366 (1999); see also *Implementation of the Telecommunications Act of 1996: Provision of Directory Listings Information under the Telecommunications Act of 1934*, Notice of Proposed Rulemaking, 14 FCC Rcd 15550 (1999) (*Directory Listings Information NPRM*).

¹⁸⁸ While both sections 251(b)(3) and 271(c)(2)(B)(vii)(II) refer to nondiscriminatory access to “directory assistance,” section 251(b)(3) refers to nondiscriminatory access to “operator services,” while section 271(c)(2)(B)(vii)(III) refers to nondiscriminatory access to “operator call completion services.” 47 U.S.C. §§ 251(b)(3), 271(c)(2)(B)(vii)(III). The term “operator call completion services” is not defined in the Act, nor has the Commission previously defined the term. However, for section 251(b)(3) purposes, the term “operator services” was defined as meaning “any automatic or live assistance to a consumer to arrange for billing or completion, or both, of a telephone call.” *Local Competition Second Report and Order*, 11 FCC Rcd at 19448, para. 110. In the same order the Commission concluded that busy line verification, emergency interrupt, and operator-assisted directory assistance are forms of “operator services,” because they assist customers in arranging for the billing or completion (or both) of a telephone call. *Id.* at 19449, para. 111. All of these services may be needed or used to place a call. For example, if a customer tries to direct dial a telephone number and constantly receives a busy signal, the customer may contact the operator to attempt to complete the call. Since billing is a necessary (continued..)

In the *Local Competition Second Report and Order*, the Commission held that the phrase “nondiscriminatory access to directory assistance and directory listings” means that “the customers of all telecommunications service providers should be able to access each LEC’s directory assistance service and obtain a directory listing on a nondiscriminatory basis, notwithstanding: (1) the identity of a requesting customer’s local telephone service provider; or (2) the identity of the telephone service provider for a customer whose directory listing is requested.”¹⁸⁹ The Commission concluded that nondiscriminatory access to the dialing patterns of 4-1-1 and 5-5-5-1-2-1-2 to access directory assistance were technically feasible, and would continue.” The Commission specifically held that the phrase “nondiscriminatory access to operator services” means that “a telephone service customer, regardless of the identity of his or her local telephone service provider, must be able to connect to a local operator by dialing ‘O,’ or ‘Oplus’ the desired telephone number.””

58. Competing carriers may provide operator services and directory assistance by reselling the BOC’s services, outsourcing service provision to a third-party provider, or using their own personnel and facilities. The Commission’s rules require BOCs to permit competitive LECs wishing to resell the BOC’s operator services and directory assistance to request the BOC

(Continued from previous page)

part of call completion, and busy line verification, emergency interrupt, and operator-assisted directory assistance can all be used when an operator completes a call, the Commission concluded in the *Second BellSouth Louisiana Order* that for checklist compliance purposes, “operator call completion services” is a subset of or equivalent to “operator service.” *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20740, n.763. As a result, the Commission uses the nondiscriminatory standards established for operator services to determine whether nondiscriminatory access is provided.

¹⁸⁹ 47 C.F.R. § 51.217(c)(3); *Local Competition Second Report and Order*, 11 FCC Rcd at 19456-58, paras. 130-35. The *Local Competition Second Report and Order*’s interpretation of section 251(b)(3) is limited “to access to each LEC’s directory assistance service.” *Id.* at 19456, para. 135. However, section 271(c)(2)(B)(vii) is not limited to the LEC’s systems but requires “nondiscriminatory access to . . . directory assistance to allow the other carrier’s customers to obtain telephone numbers.” 47 U.S.C. § 271(c)(2)(B)(vii). Combined with the Commission’s conclusion that “incumbent LECs must unbundle the facilities and functionalities providing operator services and directory assistance from resold services and other unbundled network elements to the extent technically feasible,” *Local Competition First Report and Order*, 11 FCC Rcd at 15772-73, paras. 535-37, section 271(c)(2)(B)(vii)’s requirement should be understood to require the BOCs to provide nondiscriminatory access to the directory assistance service provider selected by the customer’s local service provider, regardless of whether the competitor; provides such services itself; selects the BOC to provide such services; or chooses a third party to provide such services. See *Directory Listings Information NPRM*.

¹⁹⁰ *Local Competition Second Report and Order*, 11 FCC Rcd at 19464, para. 151.

¹⁹¹ *Id.* at 19464, para. 151.

to brand their calls.”” Competing carriers wishing to provide operator services or directory assistance using their own or a third party provider’s facilities and personnel must be able to obtain directory listings either by obtaining directory information on a “read only” or “per dip” basis from the BOC’s directory assistance database, or by creating their own directory assistance database by obtaining the subscriber listing information in the BOC’s **database**.¹⁹³ Although the Commission originally concluded that BOCs must provide directory assistance and operator services on an unbundled basis pursuant to sections 251 and 252, the Commission removed directory assistance and operator services from the list of required UNEs in the *UNE Remand Order*.”” Checklist item obligations that do not fall within a BOC’s obligations under section 251(c)(3) are not subject to the requirements of sections 251 and 252 that rates be based on forward-looking economic **costs**.¹⁹⁵ Checklist item obligations that do not fall within a BOC’s UNE obligations, however, still must be provided in accordance with sections 201(b) and 202(a), which require that rates and conditions be Just and reasonable, and not unreasonably discriminatory.’%

¹⁹² 47 C.F.R. § 51.217(d); *Local Competition Second Report and Order*, 11 FCC Rcd at 19463, para. 148. For example, when customers call the operator or calls for directory assistance, they typically hear a message, such as “thank **you** for using XYZ Telephone Company.” Competing carriers may use the BOC’s brand, request the **BOC** to brand the call with the competitive carriers name or request that the BOC not brand the call at all. 47 C.F.R. § 51.217(d).

¹⁹³ 47 C.F.R. § 51.217(C)(3)(ii); *Local Competition Second Report and Order*, 11 FCC Rcd at 19460-61, paras. 141-44; *Implementation of the Telecommunications Act of 1996: Telecommunications Carriers’ Use of Customer Proprietary Network Information and Other Customer Information, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Provision of Directory Listing Information Under the Communications Act of 1934, as amended*, Third Report and Order, Second Order on Reconsideration, and Notice of Proposed Rulemaking, 14 FCC Rcd **15550**, 15630-31, paras. 152-54 (1999); *Provision of Directory Listing Information Under the Communications Act of 1934, as amended*, First Report and Order, 16 FCC Rcd 2736, 2743-51 (2001).

¹⁹⁴ *UNE Remand Order*, 15 FCC Rcd at 3891-92, paras. 441-42.

¹⁹⁵ *UNE Remand Order*, 15 FCC Rcd at 3905, para. 470; *see generally* 47 U.S.C. §§ 251-52; *see also* 47 U.S.C. § 252(d)(1)(A)(i) (requiring UNE rates to be “based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the ... network element”).

¹⁹⁶ *UNE Remand Order*, 15 FCC Rcd at 3905-06, paras. 470-73; *see also* 47 U.S.C. §§ 201(b), 202(a).

H Checklist Item 8 – White Pages Directory Listings

59. Section 271(c)(2)(B)(viii) of the 1996 Act requires a BOC to provide “[w]hite pages directory listings for customers of the other carrier’s telephone exchange **service**.”¹⁹⁷ Section 251(b)(3) of the 1996 Act obligates all LECs to permit competitive providers of telephone exchange service and telephone toll service to have nondiscriminatory access to directory listing.¹⁹⁸

60. In the *Second BellSouth Louisiana Order*, the Commission concluded that, “consistent with the Commission’s interpretation of ‘directory listing’ **as** used in section 251(b)(3), the term ‘white pages’ in section 271(c)(2)(B)(viii) refers to the local alphabetical directory that includes the residential and business listings of the customers of the local exchange **provider**.”¹⁹⁹ The Commission further concluded, “the term ‘directory listing,’ **as** used in this section, includes, at a minimum, the subscriber’s name, address, telephone number, or any combination **thereof**.”²⁰⁰ The Commission’s *Second BellSouth Louisiana Order* also held that a BOC satisfies the requirements of checklist item 8 by demonstrating that it: (1) provided nondiscriminatory appearance and integration of white page directory listings to competitive LECs’ customers; and (2) provided white page listings for competitors’ customers with the same accuracy and reliability that it provides its own customers.”

I Checklist Item 9 – Numbering Administration

61. Section 271(c)(2)(B)(ix) of the 1996 Act requires a BOC to provide “nondiscriminatory access to telephone numbers for assignment to the other carrier’s telephone exchange service customers,” until “the date by which telecommunications numbering

¹⁹⁷ 47 U.S.C. § 271(c)(2)(B)(viii).

¹⁹⁸ *Id.* § 251(b)(3).

¹⁹⁹ *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20748, para. 255.

²⁰⁰ *Id.* In the *Second BellSouth Louisiana Order*, the Commission stated that the definition of “directory listing” was synonymous with the definition of “subscriber list information.” *Id.* at 20747 (citing the *Local Competition Second Report and Order*, 11 FCC Rcd at 19458-59). However, the Commission’s decision in a later proceeding obviates this comparison, and supports the definition of directory listing delineated above. *See Implementation of the Telecommunications Carriers’ Use of Customer Proprietary Network Information and Other Customer Information*, CC Docket No. 96-115, Third Report and Order; *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, Second Order on Reconsideration; *Provision of Directory Listing Information under the Telecommunications Act of 1934, As Amended*, CC Docket No. 99-273, FCC 99-227, Notice of Proposed Rulemaking, para. 160 (rel. Sept. 9, 1999).

²⁰¹ *Id.*

administration, guidelines, plan, or rules are **established**.”²⁰² The checklist mandates compliance with “such guidelines, plan, or rules” after they have been **established**.²⁰³ A BOC must demonstrate that it adheres to industry numbering administration guidelines and Commission rules.²⁰⁴

J. Checklist Item 10 –Databases and Associated Signaling

62. Section 271(c)(2)(B)(x) of the 1996 Act requires a BOC to provide “nondiscriminatory access to databases and associated signaling necessary for call routing and completion.”²⁰⁵ In the *Second BellSouth Louisiana Order*, the Commission required BellSouth to demonstrate that it provided requesting carriers with nondiscriminatory access to: “(1) signaling networks, including signaling links and signaling transfer points; (2) certain call-related databases necessary for call routing and completion, or in the alternative, a means of physical access to the signaling transfer point linked to the unbundled database; and (3) Service Management Systems (SMS).”²⁰⁶ The Commission also required BellSouth to design, create, test, and deploy Advanced Intelligent Network (AIN) based services at the SMS through a Service Creation Environment (SCE).²⁰⁷ In the *Local Competition First Report and Order*, the Commission defined call-related databases **as** databases, other than operations support systems, that are used in signaling networks for billing and collection or the transmission, routing, or other provision of telecommunications service.²⁰⁸ At that time the Commission required incumbent LECs to provide unbundled access to their call-related databases, including but not limited to: the Line Information Database (LIDB), the Toll Free Calling database, the Local Number Portability database, and Advanced Intelligent Network databases.²⁰⁹ In the *UNE Remand Order*,

²⁰² 47 U.S.C. § 271(c)(2)(B)(ix).

²⁰³ *Id.*

²⁰⁴ See *Second Bell South Louisiana Order*, 13 FCC Rcd at 20752; see also *Numbering Resource Optimization*, Report and Order and Further Notice of Proposed Rulemaking, 15 FCC Rcd 7574 (2000); *Numbering Resource Optimization*, Second Report and Order, Order on Reconsideration in CC Docket No. 99-200 and Second Further Notice of Proposed Rulemaking in CC Docket No. 99-200, CC Docket Nos. 96-98; 99-200 (rel. Dec. 29, 2000); *Numbering Resource Optimization*, Third Report and Order and Second Order on Reconsideration in CC Docket No. 96-98 and CC Docket No. 99-200 (rel. Dec. 28, 2001).

²⁰⁵ 47 U.S.C. § 271(c)(2)(B)(x).

²⁰⁶ *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20753, para. 267.

²⁰⁷ *Id.* at 20755-56, para. 272.

²⁰⁸ *Local Competition First Report and Order*, 11 FCC Rcd at 15741, n.1126; *UNE Remand Order*, 15 FCC Rcd at 3875, para. 403.

²⁰⁹ *Id.* at 15741-42, para. 484.

the Commission clarified that the definition of call-related databases “includes, but is not limited to, the calling name (CNAM) database, **as well as** the 911 and E911 databases.””

K. Checklist Item **11** – Number Portability

63. Section 271(c)(2)(B) of the 1996 Act requires a BOC to comply with the number portability regulations adopted by the Commission pursuant to section 251.²¹¹ Section 251(b)(2) requires all LECs “to provide, to the extent technically feasible, number portability in accordance with requirements prescribed by the Commission.”” The 1996 Act defines number portability **as** “the ability of users of telecommunications services to retain, at the same location, existing telecommunications numbers without impairment of quality, reliability, or convenience when switching from one telecommunications carrier to another.”” In order to prevent the cost of number portability from thwarting local competition, Congress enacted section 251(e)(2), which requires that “[t]he cost of establishing telecommunications numbering administration arrangements and number portability shall be borne by all telecommunications carriers on a competitively neutral basis **as** determined by the Commission.”” Pursuant to these statutory provisions, the Commission requires LECs to offer interim number portability “to the extent technically **feasible**.”²¹⁵ The Commission also requires LECs to gradually replace interim number portability with permanent number **portability**.²¹⁶ The Commission has established guidelines for states to follow in mandating a competitively neutral cost-recovery mechanism for interim

²¹⁰ *UNE Remand Order*, 15 FCC Rcd at 3875, para. 403.

²¹¹ 47 U.S.C. § 271(c)(2)(B)(xii).

²¹² *Id.* at § 251(b)(2).

²¹³ *Id.* at § 153(30).

²¹⁴ *Id.* at § 251(e)(2); *see also Second BellSouth Louisiana Order*, 13 FCC Rcd at 20757, para. 274; *In the Matter of Telephone Number Portability*, Third Report and Order, 13 FCC Rcd 11701, 11702-04 (1998) (*Third Number Portability Order*); *In the Matter of Telephone Number Portability*, Fourth Memorandum Opinion and Order on Reconsideration, 15 FCC Rcd 16459, 16460, 16462-65, paras. 1, 6-9 (1999) (*Fourth Number Portability Order*).

²¹⁵ *Fourth Number Portability Order*, 15 FCC Rcd at 16465, para. 10; *Telephone Number Portability*, First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 8352, 8409-12, paras. 110-16 (1996) (*First Number Portability Order*); *see also* 47 U.S.C. § 251(b)(2).

²¹⁶ *See* 47 C.F.R. §§ 52.3(b)-(f); *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20758, para. 275; *First Number Portability Order*, 11 FCC Rcd at 8355, 8399-8404, paras. 3, 91; *Third Number Portability Order*, 13 FCC Rcd at 11708-12, paras. 12-16.

number portability,²¹⁷ and created a competitively neutral cost-recovery mechanism for long-term number portability?”

L. Checklist Item 12– Local Dialing Parity

64. Section 271(c)(2)(B)(xii) requires a BOC to provide “[n]ondiscriminatory access to such services or information **as** are necessary to allow the requesting carrier to implement local dialing parity in accordance with the requirements of section 251(b)(3).”²¹⁹ Section 251(b)(3) imposes upon all LECs “[t]he duty to provide dialing parity to competing providers of telephone exchange service and telephone toll service with no unreasonable dialing delays.”²²⁰ Section 153(15) of the Act defines “dialing parity” **as** follows:

[A] person that is not an affiliate of a local exchange carrier is able to provide telecommunications services in such a manner that customers have the ability to route automatically, without the use of any access code, their telecommunications to the telecommunications services provider of the customer’s designation.”

65. **The** rules implementing section 251(b)(3) provide that customers of competing carriers must be able to dial the same number of digits the BOC’s customers dial to complete a local telephone call.²²² Moreover, customers of competing carriers must not otherwise suffer

²¹⁷ See 47 C.F.R. § 52.29; *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20758, para. 275; *First Number Portability Order*, 11 FCC Rcd at 8417-24, paras. 127-40.

²¹⁸ See 47 C.F.R. §§ 52.32, 52.33; *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20758, para. 275; *Third Number Portability Order*, 13 FCC Rcd at 11706-07, para. 8; *Fourth Number Portability Order* at 16464-65, para. 9.

²¹⁹ Based on **the** Commission’s view that section 251(b)(3) does not limit the duty to provide dialing parity to any particular form of dialing parity (*i.e.*, international, interstate, intrastate, or local), the Commission adopted rules in August 1996 to implement broad guidelines and minimum nationwide standards for dialing parity. *Local Competition Second Report and Order*, 11 FCC Rcd at 19407; *Interconnection Between Local Exchange Carriers and Commercial Mobile Radio Service Providers*, CC Docket No. 95-185, Further Order **On** Reconsideration, FCC 99-170 (rel. July 19, 1999).

²²⁰ 47 U.S.C. § 251(b)(3).

²²¹ *Id.* § 153(15).

²²² 47 C.F.R. §§ 51.205, 51.207.

inferior quality service, such as unreasonable dialing delays, compared to the BOC's customers.²²³

M. Checklist Item 13 –Reciprocal Compensation

66. Section 271(c)(2)(B)(xiii) of the Act requires that a BOC enter into “[r]eciprocal compensation arrangements in accordance with the requirements of section 252(d)(2).”²²⁴ In turn, pursuant to section 252(d)(2)(A), “a state commission shall not consider the terms and conditions for reciprocal compensation to be just and reasonable unless (i) such terms and conditions provide for the mutual and reciprocal recovery by each carrier of costs associated with the transport and termination on each carrier’s network facilities of calls that originate on the network facilities of the other carrier; and (ii) such terms and conditions determine such costs on the basis of a reasonable approximation of the additional costs of terminating such calls.”²²⁵

N. Checklist Item 14 –Resale

67. Section 271(c)(2)(B)(xiv) of the Act requires a BOC to make “telecommunications services . . . available for resale in accordance with the requirements of sections 251(c)(4) and 252(d)(3).”²²⁶ Section 251(c)(4)(A) requires incumbent LECs “to offer for resale at wholesale rates any telecommunications service that the carrier provides at retail to subscribers who are not telecommunications carriers.”²²⁷ Section 252(d)(3) requires state commissions to “determine wholesale rates on the basis of retail rates charged to subscribers for the telecommunications service requested, excluding the portion thereof attributable to any marketing, billing, collection, and other costs that will be avoided by the local exchange carrier.”²²⁸ Section 251(c)(4)(B) prohibits “unreasonable or discriminatory conditions or limitations” on service resold under section 251(c)(4)(A).²²⁹ Consequently, the Commission concluded in the *Local Competition First Report and Order* that resale restrictions are presumed to be unreasonable unless the LEC proves to the state commission that the restriction is

²²³ See 47 C.F.R. § 51.207 (requiring same number of digits to be dialed); *Local Competition Second Report and Order*, 11 FCC Rcd at 19400,19403.

²²⁴ 47 U.S.C. § 271(c)(2)(B)(xiii).

²²⁵ *Id.* § 252(d)(2)(A).

²²⁶ *Id.* § 271(c)(2)(B)(xiv).

²²⁷ *Id.* § 251(c)(4)(A).

²²⁸ *Id.* § 252(d)(3).

²²⁹ *Id.* § 251(c)(4)(B).

reasonable and nondiscriminatory.²³⁰ If an incumbent LEC makes a service available only to a specific category of retail subscribers, however, a state commission may prohibit a carrier that obtains the service pursuant to section 251(c)(4)(A) from offering the service to a different category of subscribers.²³¹ If a state creates such a limitation, it must do so consistent with requirements established by the Federal Communications Commission.²³² In accordance with sections 271(c)(2)(B)(ii) and 271(c)(2)(B)(xiv), a BOC must also demonstrate that it provides nondiscriminatory access to operations support systems for the resale of its retail telecommunications services.²³³ The obligations of section 251(c)(4) apply to the retail telecommunications services offered by a BOC's advanced services affiliate?"

V. COMPLIANCE WITH SEPARATE AFFILIATE REQUIREMENTS - SECTION 272

68. Section 271(d)(3)(B) requires that the Commission shall not approve a BOC's application to provide interLATA services unless the BOC demonstrates that the "requested authorization will be carried out in accordance with the requirements of section 272."²³⁵ The Commission set standards for compliance with section 272 in the *Accounting Safeguards Order* and the *Non-Accounting Safeguards Order*.²³⁶ Together, these safeguards discourage and

²³⁰ *Local Competition First Report and Order*, 11 FCC Rcd at 15966, para. 939; 47 C.F.R. § 51.613(b). The Eighth Circuit acknowledged the Commission's authority to promulgate such rules, and specifically upheld the sections of the Commission's rules concerning resale of promotions and discounts in *Iowa Utilities Board. Iowa Utils. Bd. v. FCC*, 120 F.3d at 818-19, *aff'd in part and remanded on other grounds, AT&T v. Iowa Utils. Bd.*, 525 U.S. 366 (1999). See also 47 C.F.R. §§ 51.613-51.617.

²³¹ 47 U.S.C. § 251(c)(4)(B).

²³² *Id.*

²³³ See, e.g., *Bell Atlantic New York Order*, 15 FCC Rcd at 4046-48, paras. 178-81 (Bell Atlantic provides nondiscriminatory access to its OSS ordering functions for resale services and therefore provides efficient competitors a meaningful opportunity to compete).

²³⁴ See *Verizon Connecticut Order*, 16 FCC Rcd 14147, 14160-63, paras. 27-33 (2001); *Association of Communications Enterprises v. FCC*, 235 F.3d 662 (D.C. Cir. 2001).

²³⁵ 47 U.S.C. § 271(d)(3)(B).

²³⁶ See *Implementation of the Accounting Safeguards Under the Telecommunications Act of 1996*, CC Docket No. 96-150, Report and Order, 11 FCC Rcd 17539 (1996) (*Accounting Safeguards Order*), Second Order on Reconsideration, FCC 00-9 (rel. Jan. 18, 2000); *Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as amended*, CC Docket No. 96-149, First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 21905 (1996) (*Non-Accounting Safeguards Order*), petition for review pending sub nom. *SBC Communications v. FCC*, No. 97- (continued...)